

Date: Sun, 14 Aug 94 09:59:06 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #915  
To: Info-Hams

Info-Hams Digest                      Sun, 14 Aug 94                      Volume 94 : Issue    915

Today's Topics:

        ..from an aspiring ham  
                ANS-225 BULLETINS  
        Daily Summary of Solar Geophysical Activity for 13 August  
                Help! BALLENTINE 1042A!  
                Icom 27H  
        Info-Hams Digest V94 #913  
                In plain English...  
        IPS Daily Report - 11 August 94  
                Manual Needed  
        What does "beverage" mean?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----

Date: 12 Aug 1994 00:22:01 GMT  
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!howland.reston.ans.net!spool.mu.edu!  
news.nd.edu!moe!rnimtz@network.ucsd.edu  
Subject: ..from an aspiring ham  
To: info-hams@ucsd.edu

In article <x49Rs1M.brunelli\_pc@delphi.com> brunelli\_pc@delphi.com writes:

>

>you may want to check out the yaesu mini 2m ht (ft11r??) as i have  
>heard nice things about them as well

>

My wife has the FT-11R and loves it, she thinks its a great purse size  
radio. Now all she needs is a license- 4 weeks and waiting. :)

Rick Nimtz N9TJG  
South Bend, Indiana  
nimtz.1@nd.edu

-----  
Date: 14 Aug 94 17:28:10 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: ANS-225 BULLETINS  
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-225.01  
AMSAT-UK COLLOQUIUM REPORT #1

HR AMSAT NEWS SERVICE BULLETIN 225.01 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 13, 1994  
TO ALL RADIO AMATEURS BT  
BID: \$ANS-225.01

AMSAT-UK Colloquium Report: Part 1

AMSAT-UK's annual Colloquium was held at the University of Surrey between 28th to 31st July 1994; over 133 people came from 22 countries in five continents to attend this Colloquium.

The University of Surrey personnel gave several talks about their equipment and the science they are conducting. Noteworthy points about their thinking include: low-cost propulsion (hybrid motors); mini-sats (up to 200 Kg) rather than MICROSATs; higher data rates; use of S-band; GTO, or modified GTO orbits; spread spectrum. One of their approaches to building less expensive satellites was the subject of one paper. It involves the use of commercial grade battery cells. A single space qualified NiCd cell costs about \$4000. Surrey buys commercial cells for about \$12 each and qualifies them for space use in house, with a resultant cost per cell of less than \$1000.

Doug Loughmiller spoke about the S-band beacon on UO-11 which has been switched on for a considerable time; but he has had no reports on it, and appealed for folks to let him know if they hear the beacon, or even if they listened but could not hear it.

Doug also provided an explanation of some of the more obscure codes seen on-screen from UO-22:

F: available space in program memory  
L: largest free part of ---''---  
TST: transputer status

d: digipeater (0=off)  
B: bytes transmitted  
Uptime: lifetime of current operations (Days/hours/minutes)  
SPIN: 10.1K12G3.2 = 10.1 seconds for one revolution; earth magnetic field  
model 12; gamma angle (largest offpoint of libration since midnight) 3.2  
deg

Ray Soifer W2RS gave a presentation regarding the US Government's intention to "sell" parts of the 2400 MHz band. Concern was expressed by many of the attendees with respect to any such attempt.

James Miller, G3RUH, gave a resume of AO-13's status. He pointed out that, since the proton event of May 13th, EDAC counts have been consistently higher than previously. He stressed, however, that AO-13 should continue working up to re-entry. Nevertheless, the effects of drag, once perigee starts to get quite low, are uncertain.

Gerard Auvray, F6FA0, talked about ARSENE which has now been abandoned. He said that the cable between 2M the equipment and antenna was changed just before launch. The suspicion is that a connector was not tightened properly. He also said that there is a new plan, involving a four to five year time-scale, to build a "micro-sat" carrying a Mode 1/S linear transponder, this time using the low end of the 2.4 GHz band. A camera may also be incorporated.

A representative from AMSAT-OZ gave a presentation about their replacement for the Kansas City Tracker. The software takes four bits from an IBM PC parallel port and controls the rotors via opto-couplers. It was said that the cost to build is about \$20 to \$25. The device works on an open loop principle whereby positioning is determined by knowing the time it takes for the rotor to move a specified distance. One can re-calibrate this by moving the rotor to its stop. It was admitted that this approach is not as precise as the Kansas City tracker and similar devices, but it is acceptable for antenna beamwidths greater than about 20 degrees. The program can also use a tracking table. AMSAT-OZ will be supplying these to AMSAT-UK for international distribution with profits going to AMSAT-UK's Phase-3D fund. AMSAT-UK will make an announcement once stocks are to hand.

[The AMSAT News Service would like to thank Richard Limebear (G3RWL) and Ray Soifer (W2RS) for their help in preparing this bulletin item.]

/EX  
SB SAT @ AMSAT \$ANS-225.02  
AMSAT-UK COLLOQUIUM REPORT #2

HR AMSAT NEWS SERVICE BULLETIN 225.02 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 13, 1994

TO ALL RADIO AMATEURS BT  
BID: \$ANS-225.02

#### AMSAT-UK Colloquium Report: Part 2

Phase-3D papers were presented by Keith Baker KB1SF, Peter Guelzow DB20S, Karl Meiner DJ4ZC (read by DB20S), Mike Dorsett G6GEJ and Hans van de Groenendaal ZS5ALE. KB1SF's talk concentrated on the work going on here in the U.S. with emphasis on current progress in getting the spaceframe, now at the Orlando Integration Facility, ready to receive modules. Peter Guelzow's paper dealt with the electronic modules to be included on the satellite, especially the RF equipment.

Future ANS bulletins will carry additional details regarding the Phase 3D subjects presented.

#### Other Future Spacecraft

Several new satellite projects were announced. One is a non-Amateur spacecraft for the Chilean Air Force called FASAT.

Sias Mostert, ZR1MS, of the University of Stellenbosch, presented a paper on a South African satellite called "SunSat". It measures 45 x 45 x 40 cm and weighs 50 Kg. Current plans call for its launch in January 1996 on a U.S. Air Force Delta mission into eccentric polar orbit measuring 400 by 800 km with a period of 100 minutes. In addition to the usual VHF/UHF (Mode u/v) communications at 1200 and 9600 bps, SunSat is said to have a capability for Mode l/s. The 2401 MHz transmitter is expected to have five watts output and use QPSK modulation and have capability for a 40 Mbps wideband digital downlink intended to transmit video images. It was noted that sufficient bandwidth for experiments such as this is not likely to be available in the 2.4 GHz band if the U.S. NTIA/FCC proposals, currently being discussed, are adopted. The spacecraft will have a conventional power system, reaction-wheel attitude control, and 64 Megabits of RAM for its 80188, 80386 computers and T-800 transputer. The imager payload will consist of a linear array CCD camera producing 8000 pixels in a moving swathe. A resolution of 50 meters per pixel is expected.

[The AMSAT News Service would like to thank Richard Limebear (G3RWL) and Ray Soifer (W2RS) for their help in preparing this bulletin item.]

/EX

SB SAT @ AMSAT \$ANS-225.03  
AMSAT-UK COLLOQUIUM REPORT #3

HR AMSAT NEWS SERVICE BULLETIN 225.03 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 13, 1994  
TO ALL RADIO AMATEURS BT

BID: \$ANS-225.03

### AMSAT-UK Colloquium Report, Part 3: International Satellite Issues

The International Satellite Meeting was chaired by G3AAJ and convened at Thursday evening. A consensus was reached regarding the relationship between the international satellite community and the IARU. This was reflected in a resolution, which reads as follows:

#### INTERNATIONAL SATELLITE MEETING

##### INTRODUCTION

The International meeting of the AMSAT Groups hosted by AMSAT-UK at the University of Surrey on 28 July, 1994 expressed concern about the manner in which the services of the IARU Satellite Coordinator were terminated.

It was resolved that:

1. The IARU Administrative Council be urged to create the following positions:
  - IARU SATELLITE LIAISON OFFICER
  - IARU SATELLITE COORDINATOR
2. The Satellite Coordinator be appointed by the IARU Administrative Council on recommendation of the above mentioned International meeting.
3. The Satellite Liaison officer be appointed by the IARU Administrative Council.
4. The IARU Satellite Coordinator reports to the IARU Satellite Liaison Officer and that he shall be re-imbursed reasonable expenses in accordance with established procedures.
5. It is the express task of the IARU Satellite Coordinator to work closely with AMSAT groups as per terms of reference.
6. The meeting recommends that Freddy de Guchteneire ON6UG be appointed to the position of IARU Satellite Coordinator. Such as appointment to be made by the IARU Administrative Council at the September 1994 meeting.

R.J.C. Broadbent, G3AAJ  
Chairman of the International Meeting

It was reported on Friday afternoon that ON6UG, who was not present at the meeting, but he had been contacted by telephone and was in agreement with

the meeting's recommendation.

It was decided that, if the satellite's owners agree, POSAT should no longer be referred to as OSCAR 28 since it has been withdrawn from amateur use, but that the number 28 shall be reserved in case POSAT is returned to amateur use in the future.

On Sunday afternoon, Ivan, OZ7IS, chairman of the IARU Region 1 VHF Committee, reported on the Committee's "lengthy discussion" concerning SAREX and MIR. The Committee decided to recommend that, if possible, the downlink be moved to 145.80 and a European voice uplink be introduced at 145.20. The problem is mainly one of terrestrial QRM to the downlink due to the heavy use of 145.55 in Europe for FM simplex operation. The recommendation has been conveyed to the SAREX Working Group.

At the end of the Colloquium the award for the best paper went to James Miller G3RUH (A0-13) and second place went to Leonid Labutin UA3CR (SAREX in Moscow).

This having been the ninth and final Colloquium that Ron Broadbent G3AAJ has organized, Ron was thanked by one and all for his superb performance over the years. Next year's Colloquium, to be organized by Doug Loughmiller G0SYX, will be held 26-29 July 1995.

[The AMSAT News Service would like to thank Richard Limebear (G3RWL) and Ray Soifer (W2RS) for their help in preparing this bulletin item.]

/EX

SB SAT @ AMSAT \$ANS-225.04  
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 225.04 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 13, 1994  
TO ALL RADIO AMATEURS BT  
BID: \$ANS-225.04

Weekly OSCAR Status Reports: 13-AUG-94

A0-13: Current Transponder Operating Schedule:

M QST \*\*\* A0-13 TRANSPONDER SCHEDULE \*\*\* 1994 Jul 11 - Sep 12

Mode-B : MA 0 to MA 90 | Omnis : MA 230 to MA 30

Mode-BS : MA 90 to MA 120 |

Mode-S : MA 120 to MA 122 |<- S beacon only

Mode-S : MA 122 to MA 145 |<- S transponder; B trsp. is OFF

Mode-S : MA 145 to MA 150 |<- S beacon only

Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0

Mode-B : MA 180 to MA 256 | Move to attitude 230/0, Sep 12

=====

N QST \*\*\* AO-13 TRANSPONDER SCHEDULE \*\*\* 1994 Sep 12 - Dec 19  
 Mode-B : MA 30 to MA 150 |<- OFF Oct 22 - Nov 07 for eclipses  
 Mode-B : MA 150 to MA 190 | max duration 2h 12m  
 Mode-BS : MA 190 to MA 218 |  
 Mode-S : MA 218 to MA 220 |<- S beacon only  
 Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF  
 Mode-B : MA 230 to MA 30 | Alon/Alat 230/0  
 Omnis : MA 250 to MA 140 | Move to attitude 180/0, Dec 19

The battery charge state is of paramount importance during the eclipse seasons. As always the command team may have to have to make temporary changes to the published schedule. In that case we will try to minimize the inconvenience, setting Mode-B OFF from MA 230-256 in the first instance.

=====

[G3RUH/DB20S/VK5AGR]

RS-10: A couple of weeks ago WC9C pointed out that RS-10's 10M downlink signals were sounding quite weak in comparison to a few months ago. G3IOR thinks that the problem of weaker distant and stronger distant signals from RS-10 attributed by WC9C to the parent satellites attitude is due more to path attenuation. In the summer we have spread "E" layer levels of far higher intensity. At low angles of incidence, i.e. when the satellite is close to horizon, the path through these attenuating layers is extended, thus producing a much weaker signal, more than can be accounted for by the inverse square rule. When the satellite is close to overhead, the path is minimal, and also far less refraction, reflection and absorption results. RS-10 antenna is close to omni-directional, with only the odd end-on tip effect momentarily reducing the downlink level during its slow rotation. At night, when the ionization is markedly reduced, signals are nominal. [G3IOR @ GB7VLS]

A0-16: A0-16 is going strong with no problems. [WH6I]

L0-19: L0-19 still seems have its BBS turned off. [WH6I]

I0-27: WH6I still has not heard anything from I0-26 and is afraid that it might stay that way permanently. [WH6I]

A0-16: Still going strong and very doing well. There is some gateway traffic on A0-16 but not enough to present any problem to other users and the file lifetime on the bird is still quite long. [WH6I]

K0-23: Since yesterday K0-23 seems to be down. Yesterday the 9600 baud signal sounded normal, but there was no data on it. Today the signal sounds abnormal. N4NR also reports that K0-23 is in a mode that leaves TNCs and DSPs locked up until a cold reset at the groundstation after the pass is over. Signal strength is good, however. [WH6I & N4NR]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ N0QCU. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

-----  
Date: Sat, 13 Aug 1994 22:10:07 MDT  
From: elroy.jpl.nasa.gov!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!psgrain!  
nnntp.cs.ubc.ca!alberta!ve6mgs!usenet@ames.arpa  
Subject: Daily Summary of Solar Geophysical Activity for 13 August  
To: info-hams@ucsd.edu

\/

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

13 AUGUST, 1994

\/

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 13 AUGUST, 1994

-----  
!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 225, 08/13/94  
10.7 FLUX=084.5 90-AVG=079 SSN=059 BKI=3543 4333 BAI=022  
BGND-XRAY=B1.3 FLU1=2.7E+06 FLU10=1.2E+04 PKI=3542 4333 PAI=023  
BOU-DEV=034,083,058,021,044,038,022,038 DEV-AVG=042 NT SWF=00:000  
XRAY-MAX= C4.0 @ 1745UT XRAY-MIN= A8.6 @ 0048UT XRAY-AVG= B3.8  
NEUTN-MAX= +002% @ 2245UT NEUTN-MIN= -002% @ 2225UT NEUTN-AVG= -0.2%  
PCA-MAX= +0.2DB @ 1835UT PCA-MIN= -0.3DB @ 1530UT PCA-AVG= +0.0DB  
BOUTF-MAX=55239NT @ 0541UT BOUTF-MIN=55198NT @ 1759UT BOUTF-AVG=55218NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+076,+000,+000  
GOES6-MAX=P:+122NT@ 0609UT GOES6-MIN=N:-032NT@ 2205UT G6-AVG=+103,+033,-012  
FLUXFCST=STD:087,090,092;SESC:087,090,092 BAI/PAI-FCST=015,010,015/015,010,015  
KFCST=2324 4323 2323 3222 27DAY-AP=017,011 27DAY-KP=4434 3233 3333 3222  
WARNINGS=\*SWF  
ALERTS=



!!END-DATA!!

NOTE: The Effective Sunspot Number for 12 AUG 94 was 20.2.

The Full Kp Indices for 12 AUG 94 are: 3+ 4- 4- 2+ 3+ 3- 3o 3+

The 3-Hr Ap Indices for 12 AUG 94 are: 18 25 21 10 18 11 16 18

Greater than 2 MeV Electron Fluence for 13 AUG is: 9.2E+07

#### SYNOPSIS OF ACTIVITY

-----

Solar activity was low due to a C4/SF flare at 1744Z from Region 7765 (S11E03). This region continued to emerge and exhibited mixed polarities. A delta may be forming near the center of the Region. Several arch filament systems were reported.

Solar activity forecast: at a minimum, solar activity should be low. Continued growth in Region 7765 bodes well for the production of small M-class flares.

The geomagnetic field was mostly unsettled to active. Minor storm conditions were experienced at most sites between 0300-0600Z. Energetic electron fluxes were at a moderate level for most of the period, but became high at the end of the period.

Geophysical activity forecast: the geomagnetic field should be mostly unsettled for the next three days. Intermittent active periods are probable and isolated minor storm intervals are possible.

#### Event probabilities 14 aug-16 aug

Class M	40/40/40
Class X	05/05/05
Proton	01/01/01
PCAF	Green

#### Geomagnetic activity probabilities 14 aug-16 aug

##### A. Middle Latitudes

Active	35/30/30
Minor Storm	15/10/10
Major-Severe Storm	05/01/01

##### B. High Latitudes

Active	40/30/30
--------	----------

Minor Storm 20/10/10  
Major-Severe Storm 05/01/01

HF propagation conditions were near-normal over most equatorial to middle latitude regions, although the low and equatorial paths have experienced some problems associated with sporadic-E during sunrise/sunset. High and polar latitude paths observed moderate to strong signal degradation between about 06:00 UTC and 09:00 UTC due to polar substorm activity, but recovered to near-normal levels after 18:00 UTC. Conditions should gradually improve over the next several days. The enhanced solar radiation primarily associated with solar Region 7765 should begin strengthening the ionosphere slightly and may raise MUFs a bit over the next week. At the same time, there is a fair chance that this region might produce a minor M-class flare capable of producing short wave fadeouts (SWFs) over daylight paths.

#### COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

=====

#### REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 13/2400Z AUGUST

-----

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7762	N04W81	117	0090	HSX	02	002	ALPHA	
7764	S06E40	356	0080	HSX	02	001	ALPHA	
7765	S11E02	034	0170	DAI	09	026	BETA-GAMMA	

REGIONS DUE TO RETURN 14 AUGUST TO 16 AUGUST

NMBR LAT LO

7760 S07 271

#### LISTING OF SOLAR ENERGETIC EVENTS FOR 13 AUGUST, 1994

-----

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP	SWF
NO EVENTS OBSERVED										

#### POSSIBLE CORONAL MASS EJECTION EVENTS FOR 13 AUGUST, 1994

-----

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
13/1222	1231	1302		LDE	B2.4	40		

#### INFERRED CORONAL HOLES: LOCATIONS VALID AT 13/2400Z

-----

ISOLATED HOLES AND POLAR EXTENSIONS

	EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
96	S02W41	S10W59	N23W74	N27W49	095	ISO	POS	015	10830A

#### SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
12 Aug:	0336	0341	0347	B1.3						
	0401	0404	0406	B1.0						
	0533	0540	0551	B2.2	SF	7765	S12E26			
	0709	0715	0726	B1.7	SF	7765	S12E25			
	0743	0746	0749	B5.6	SF	7765	S12E25			
	1004	1014	1022	B6.0	SF	7765	S12E24			
	1128	1139	1147	B8.2	SF	7765	S11E23			
	1701	1704	1706	B1.7						
	2322	2328	2339	B4.2	SF	7765	S11E14			

#### REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7765:	0	0	0	6	0	0	0	0	006	(66.7)
Uncorrelated:	0	0	0	0	0	0	0	0	003	(33.3)

Total Events: 009 optical and x-ray.

#### EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
12 Aug:	1128	1139	1147	B8.2	SF	7765	S11E23	III

#### NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II        = Type II Sweep Frequency Event  
III       = Type III Sweep  
IV        = Type IV Sweep  
V        = Type V Sweep  
Continuum = Continuum Radio Event  
Loop      = Loop Prominence System,  
Spray     = Limb Spray,  
Surge     = Bright Limb Surge,  
EPL       = Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

-----

Date: Fri, 12 Aug 1994 21:47:26 GMT  
From: spstimes.sps.mot.com!mogate!newsgate!news@uunet.uu.net  
Subject: Help! BALLENTINE 1042A!  
To: info-hams@ucsd.edu

Hi Folks,

I am in need of a Manual for a oscilloscope that used to be sold by BALLENTINE (based in New Jersey) but not manufactured by them.  
The model number is 1042A(I assume it means 10MHz); It is a 2-channel scope.

A friend of mine hinted to me that some BNK Precision scopes are similar to the one I have and maybe an old issue of Popular Electronics might have published some info about the Ballentine scopes.

I appreciate any information on how to get a copy(hopefully inexpensive!).

PS. This is my first posting to a news group; If this message offended some hamsters

for posting it here, I appologize for that.

I would appreciate any hints on where to properly post such messages next time.

Thanks,  
TES

-----

Date: 14 Aug 1994 07:54:03 -0400  
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Icom 27H  
To: info-hams@ucsd.edu

Does anyone know of mods for this radio? It's an older 2meter mobile rig.  
I'm sure it's possible.

xhacker@aol.com

-----  
Date: 14 Aug 94 13:23:39 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Info-Hams Digest V94 #913  
To: info-hams@ucsd.edu

I understand I can get a free subscription to Natural Hazards observer.  
Think this will help me with my volunteering for local red cross and  
civil defense. address E. E. Miller, 6827 Adams St Lincoln, NE 68507  
thank you--agri045@unlvm.unl.edu

\*\*\*\*\*  
\* Skip Miller, W0KVM \* BITNET: AGRI045@UNLVM \*  
\* \* INTERNET: AGRI045@UNLVM.UNL.EDU \*  
\*\*\*\*\*

-----  
Date: Fri, 12 Aug 1994 22:42:06 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!sdd.hp.com!hp-  
pcd!hpspkla!depaul@network.ucsd.edu  
Subject: In plain English...  
To: info-hams@ucsd.edu

Thanks to all who have written.

By the way, I've stated that the antenna tuner is OPEN. It's  
a balanced -balanced antenna tuner with a huge vari cap and  
two roller inductors. I'm using open wire line. I'm NOT  
using the "typical?" rig--coax--antenna set up. Damn, I knew  
I liked 40 meters for a reason (maybe it made me feel physically  
better too!...)

Take Care,

Marc

-----

Date: Thu, 11 Aug 1994 23:20:14 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!agate!msuinfo!  
harbinger.cc.monash.edu.au!news.cs.su.oz.au!metro!ipso!rwc@network.ucsd.edu  
Subject: IPS Daily Report - 11 August 94  
To: info-hams@ucsd.edu

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT  
ISSUED AT 11/2330Z AUGUST 1994 BY IPS RADIO AND SPACE SERVICES  
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.  
SUMMARY FOR 11 AUGUST AND FORECAST FOR 12 AUGUST - 14 AUGUST  
-----

#### 1A. SOLAR SUMMARY

Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 77/16

GOES satellite data for 10 Aug

Daily Proton Fluence >1 MeV: 6.4E+05

Daily Proton Fluence >10 MeV: 1.3E+04

Daily Electron Fluence >2 MeV: 2.2E+06

X-ray background: A3.7

Fluence (flux accumulation over 24hrs)/ cm<sup>2</sup>-ster-day.

#### 1B. SOLAR FORECAST

	12 Aug	13 Aug	14 Aug
Activity	Very low	Very low	Very low
Fadeouts	None expected	None expected	None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number for 12 Aug: 77/16  
-----

#### 2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth: unsettled

Estimated Indices :	A	K	Observed A Index	10 Aug
Learmonth	13	2333 3233		
Fredericksburg	15		15	
Planetary	15		16	

Observed Kp for 10 Aug: 3232 4443

#### 2B. MAGNETIC FORECAST

DATE	Ap	CONDITIONS
12 Aug	13	Unsettled
13 Aug	10	Unsettled
14 Aug	8	Quiet to unsettled

COMMENT: IPS Geomagnetic Warning 2 was issued on 7 August and is current for interval 10-12 August.

-----  
3A. GLOBAL HF PROPAGATION SUMMARY

	LATITUDE BAND		
DATE	LOW	MIDDLE	HIGH
11 Aug	normal	normal	fair-normal

PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST

	LATITUDE BAND		
DATE	LOW	MIDDLE	HIGH
12 Aug	normal	normal	fair
13 Aug	normal	normal	fair
14 Aug	normal	normal	fair

-----  
4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY

Observed

DATE	T-index	MUFs at Sydney
11 Aug	34	about 10% above predicted monthly values, with spread F 8-15UT and enhancements of 30-50% from 11-18UT(local night).

Predicted Monthly T-index for August: 20

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

DATE	T-index	MUFs
12 Aug	30	About 10% above predicted monthly values
13 Aug	25	Near predicted monthly values
14 Aug	25	Near predicted monthly values

--

IPS Regional Warning Centre, Sydney	IPS Radio and Space Services
RWC Duty Forecaster tel: +61 2 4148329	PO Box 5606
Recorded Message tel: +61 2 4148330	West Chatswood NSW 2057
email: rwc@ips.oz.au fax: +61 2 4148331	AUSTRALIA

-----  
Date: 12 Aug 94 18:24:00 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!cs.utexas.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!csusac!csus.edu!netcom.com!netcomsv!eabbs!don.turner@network.ucsd.edu  
Subject: Manual Needed  
To: info-hams@ucsd.edu

Hi guys. I need a manual for a Tektronics 453 oscilloscope model 703K. This is the later beast with the FET frontend, not the dread (and

unavailable) Neuvistors input amplifiers. I can use an earlier manual instead if the later one isn't around. Please dig through your stuff.  
.....Don WA6WRX

-----  
Date: Sat, 13 Aug 1994 04:05:02 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!  
zip.eecs.umich.edu!yeshua.marcam.com!news.kei.com!uhog.mit.edu!news.media.mit.edu!  
news.media.mit.edu.!sro@@  
Subject: What does "beverage" mean?  
To: info-hams@ucsd.edu

Never let it be said that I put things away when I'm done with them...

I just happened to have the January, 1982 issue of QST sitting on the floor next to me. On the cover is a colorized version of a photo of a Beverage antenna from the November, 1922 QST. QST reprinted the original article with a commentary by Doug DeMaw on the not-quite 50th anniversary.

H. H. Beverage, ex-W2BML, published the original article in QST on the antenna that came to take his name. It's a great, low-noise receiving antenna for MF and lower frequencies (it works well with groundwave, low-angle signals, but it's pretty bad with sky wave signals.)

It's not a good antenna for city dwellers--at a minimum, the antenna should be at least a wavelength. It's easy to set up, though--just string a really long wire 10-20 feet above ground, terminate the far end with the proper resistive load, and \*presto\*, you can hear everyone on 160 meters. well... :)

-----  
H. H. Beverage and Doug DeMaw, "The Classic Beverage Antenna, Revisited," QST, January, 1982, pp. 11-17.

H. H. Beverage, "A Wave Antenna for 200-Meter Reception," QST, November 1922, p.7. See also "The Wave Antenna, a New Type of Highly Directive Array." in the Transactions of the AIEE, 1923.

-----  
--Shawn, K3HI  
-----

Date: 12 Aug 1994 22:27:00 GMT



From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!  
howland.reston.ans.net!spool.mu.edu!news.nd.edu!moe!rnimtz@network.ucsd.edu  
To: info-hams@ucsd.edu

References <9408111747.aa24989@COR5.PICA.ARMY.MIL>, <32g3qf\$i83@masala.cc.uh.edu>,  
<32gk9c\$5mv@lucy.infi.net>s.net  
Subject : Re: What does "beverage" mean?

>David Jenkins (djenkins@jetson.uh.edu) wrote:  
>

>: I have seen other references to "beverage" in this group, but my  
>: handy-dandy Random House shows only the usual definition for  
>: the word. What does it mean in ham-ese?

Beverage (sp) is the surname of the person that designed the antenna.

Rick Nimtz  
N9TJG  
nimtz.1@nd.edu

-----  
Date: Sat, 13 Aug 1994 20:20:11 GMT  
From: ihnp4.ucsd.edu!sdd.hp.com!math.ohio-state.edu!usc!howland.reston.ans.net!  
europa.eng.gtefsd.com!library.ucla.edu!csulb.edu!csus.edu!netcom.com!  
btoback@network.ucsd.edu  
To: info-hams@ucsd.edu

References <32ggg8\$hsh@hollywood.cinenet.net>,  
<1994Aug13.082514.868@ke4zv.atl.ga.us>, <32irct\$f3u@news.tamu.edu>.g  
Subject : Re: Homebrew Global Positioning System (GPS)

In article <32irct\$f3u@news.tamu.edu> gerry@cs.tamu.edu (Gerald J Creager) writes:  
>[Gary Coffman writes]:

>>You aren't going to be able to get a GPS and cell phone for a couple  
>>hundred dollars. The cheapest GPS receivers are around \$400, and so  
>>are cell phones unless you roll their cost into a long term service  
>>contract.

>  
>Actually, if you shop carefully, the DGPS without a fancy display costs \$318.  
>Quantity 1. It's a Motorola VP Encore core module, and it runs on 5 VDC  
>(regulated), puts out TTL levels, and can receive RTCM-104S differential  
>updates with Option B installed (for no cost, I might add!). Further, with  
>Option B, it will put out the differential correction data, acting as a  
>reference station, albeit in Motorola's Proprietary Binary format. The  
>developers' manual has the full data format, making translation to the  
>standard format pretty straightforward.

Where can I get more information about this device and the developers' manual? This sounds very interesting!

>

>The cellphone could be the hard part, from a cost perspective.

In California, various places are selling the bottom-of-the-line Motorola portable cellphone for \$100, with no activation required. (CA has a law prohibiting anyone from requiring the purchase of cellular service with a phone. However, you do get a VERY nasty look from the salesperson when you say "No, I just want the phone.") It's almost getting to the point where it's worth investigating what it would take to put one of those phones on the 900 MHz ham band.

Incidentally, one of the earlier posters in this thread mentioned tracking vehicles using the GPS/cellphone system. We had a demonstration here a couple of months ago in which a ham put a GPS/APRS system in his wife's car, and produced the resulting map for the local packet users group. The map provided an every-two-minutes location for the car for an entire day.

-- Bruce KN6MN

-----

End of Info-Hams Digest V94 #915

\*\*\*\*\*